

I. E. PALMER.

Improvement in Tackle-Blocks.

No. 114,333.

Patented May 2, 1871.

Fig. 1.

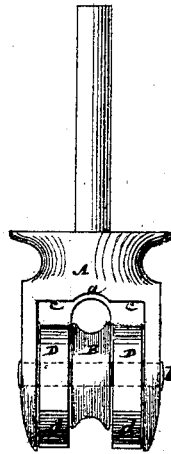


Fig. 2.

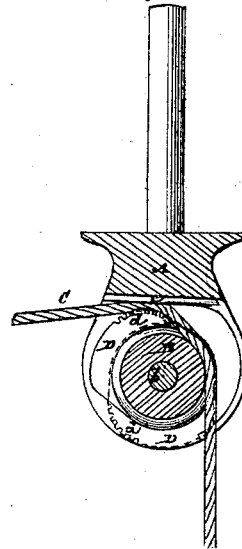
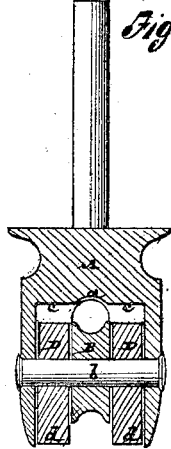


Fig. 3.



Witnesses.
Fred. H. Hayes
R. E. Kabin

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United States Patent Office.

ISAAC E. PALMER, OF HACKENSACK, NEW JERSEY.

Letters Patent No. 114,333, dated May 2, 1871; antedated April 22, 1871.

IMPROVEMENT IN TACKLE-BLOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ISAAC E. PALMER, of Hackensack, in the county of Bergen and State of New Jersey, have invented a new and useful Improvement in Tackle-Blocks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification; and in which—

Figure 1 represents a front view, and

Figures 2 and 3 sectional views, at right angles to each other, of a tackle-block constructed in accordance with my improvement.

Similar letters of reference indicate corresponding parts.

My invention consists in a combination, with a grooved guide, which may either be a pulley or a fixture, carried by the head or shell of the block for the rope in hoisting or lowering to run upon, of one or more independent cams or eccentrics arranged by the side of the grooved guide, and made capable of turning for operation in relation with a portion or surface connected with the block, so that the rope or fall may be clamped, when desired, between said portion or surface and the cam or eccentric by simply leading the rope at its one end, so that it passes from its grooved guide onto the independent cam or eccentric, and slackening the rope, whereby the cam or eccentric is made to turn by the heft on the rope at its opposite end, and caused to clamp the rope against the portion or surface of the block it works in relation with, and the rope thereby secured without tying or other means of fastening.

Referring to the accompanying drawing—

A represents the head or shell of the block; provided with a grooved guide, B, which may either be

a revolving pulley or fixture for the rope C, when working, to run upon.

The head A may also be grooved, as at *a*, to facilitate entry and free run of the rope over the grooved guide B.

Arranged on one or both sides of this grooved guide, and carried by the head A, are independent cams or eccentrics D D, free to turn around their axis as on a pivot, *b*.

These cams may either be plain or serrated on their peripheries, and should be of such sizes transversely that when the lesser protruding portions of their peripheries are adjacent to portions or surfaces *c c* in the head, which occupy an invariable distance from the axis of the cams, the rope C may be readily led or turned by pulling obliquely on its loose end from off the grooved guide B onto either cam D between it and either head portion *c*, so that on slackening the fall or loose end of the rope the heft on its opposite end is made to turn the cam and cause its more prominent portion, *d*, to clamp the rope between it and the portion *c*, and so hold the rope secure without tying or any other means of fastening.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination, with the grooved guide or pulley B, of one or more independent cams or eccentrics D, hung free to turn, and arranged on one or both sides of said grooved guide for operation with and relatively to gripping surfaces *c* in or on the head of the block, substantially as specified.

ISAAC E. PALMER.

Witnesses:

FRED. HAYNES,
HENRY PALMER.